USGS science for a changing world

Earthquake Shaking — Green Alert

GSN ANSS USAID FROM THE AMERICAN PEOPLE

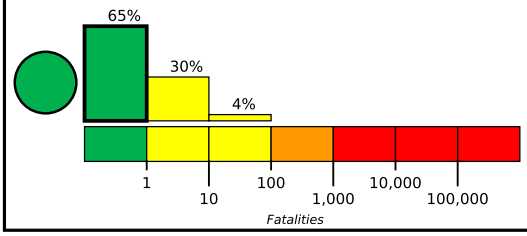
M 6.0, 50 km ESE of Manay, Philippines

Origin Time: 2022-04-20 21:57:43 UTC (Thu 05:57:43 local)
Location: 6.9686° N 126.9241° E Depth: 19.0 km

PAGER Version 6

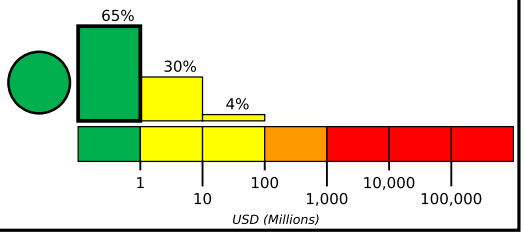
Created: 2 weeks, 2 days after earthquake

Estimated Fatalities



Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

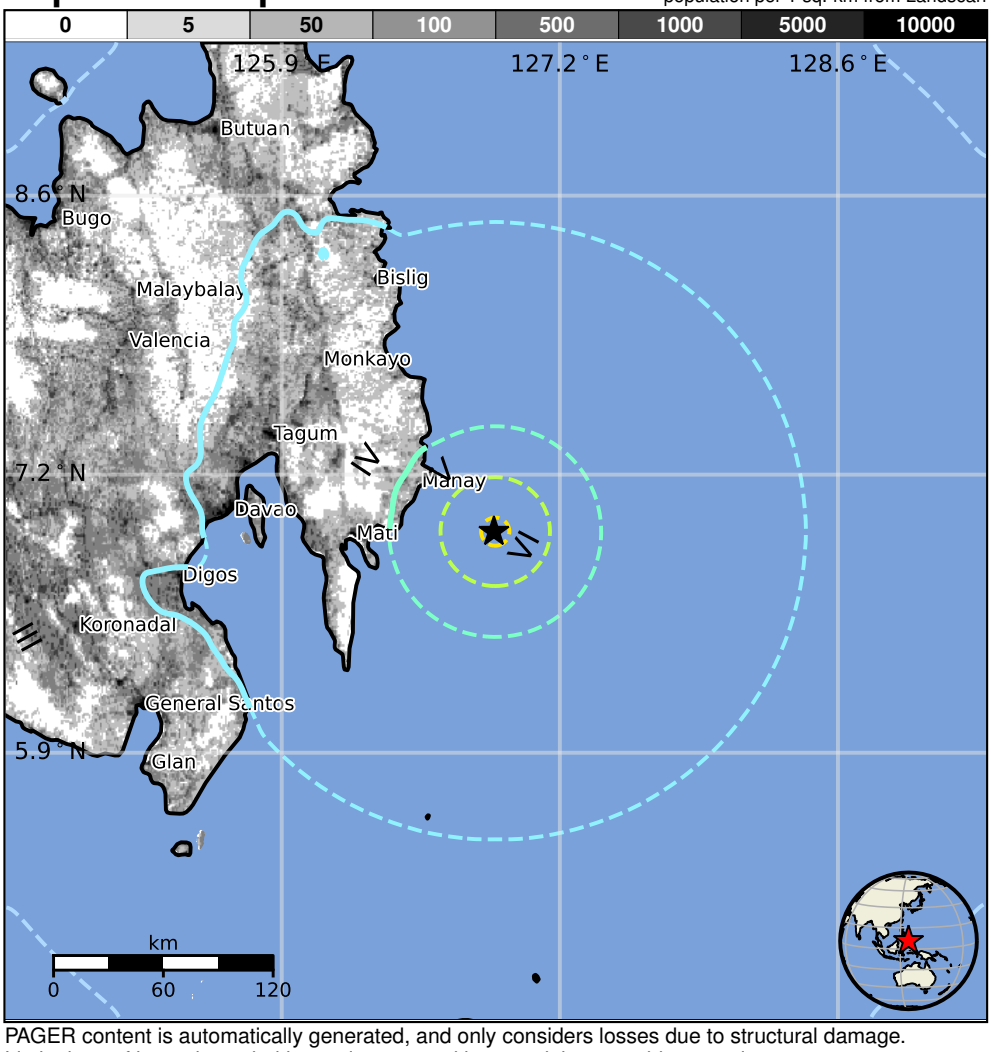


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	9,780k*	5,772k	73k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1987-05-23	197	5.7	VII(70k)	1
1987-05-18	227	6.2	VIII(12k)	1
2002-03-05	317	7.5	VIII(12k)	15

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
V	**Manay**	**20k**
V	Tarragona	4k
V	Jovellar	2k
V	San Ignacio	6k
V	Santiago	3k
V	Baculin	3k
IV	**Davao**	**1,213k**
III	**General Santos**	**680k**
III	**Koronadal**	**126k**
III	**Butuan**	**310k**
III	Cagayan de Oro	445k

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.gov/earthquakes/eventpage/us6000hf49#pager

Event ID: us6000hf49